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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/528,566
Filing Date: December 14, 2005
Appellant(s): BURR ET AL.

Richard L. Schwaab
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 12/20/2007 appealing from the Office action mailed 6/06/2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5,101,883	KINMARTIN	4-1992
6,575,701	KAMIYA	6-2003

4,718,244	KOBAYASHI	1-1988
4,692,113	TAKAI	9-1987
2005/0095044	YOON	5-2005
2002/0071523	BUSSE	6-2002
2002/0136509	WATSON	9-2002

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 15-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Kinmartin (Pat. 5,101,883). Kinmartin teaches in the specification and Figs.1- 7 an invention in the same field of endeavor as applicant's invention that is described in the applicant's claims.

15. An air duct (10) for supplying air; a metering device (30a, 30b); and an air-guiding device (12) comprising a plurality of subducts (36a, 36b) for dividing air in the air-guiding device (col.3 ll.7-18) (Fig.2), and an outflow region with an outer circumferential region (46a, 46b) and a middle region (58) and, wherein one subduct

(36b) leads to the middle region (58) and another subduct (36a) leads to the outer circumferential region (46a) (Fig.2).

16. A divided entry region (38) configured such that the air in the air-guiding device is divided into the plurality of subducts (36a, 36b) without any significant change in direction of the subducts in the divided entry region (col.3 ll.7-18) (Fig.2).

17. The division in the entry region is axially symmetrical (Fig.2).

18. The air-guiding device further comprises a partition (40) which, at least in regions, runs along a longitudinal direction of the air duct (col.3 ll.7-18) (Fig.2).

19. The division of the air duct into a plurality of subducts is provided for at a distance of 1 to 10 times a mean diameter of the air duct in a corresponding region upstream of an exit of the air from the air-guiding device (Fig.2).

20. The air-guiding device further comprises an elbow, wherein the air is divided into a plurality of subducts in the region of the elbow (Fig.2).

21. The elbow has an angle (interior angle from duct 10 to air-guiding device 12 shown as 90°) from 80° to 100° (Fig.2).

22. The angle of the elbow is 90° (interior angle from duct 10 to air-guiding device 12 shown as 90°) (Fig.2).

23. The metering device (30a, 30b) is arranged upstream of the air-guiding device (12) (Fig.2).

24. The metering device (30a, 30b) is designed in such a manner that the air, which can be fed to the individual subducts (36a, 36b), is controllable (col.2 ll.59-67) (Fig.2).

25. The metering device (30a, 30b) controls both the distribution of the incoming air between the individual subducts (36a, 36b) and the metering thereof (col.2 ll.59-67).

26. The metering device provided is an actuating device (66) has a double flap (62, 64) controlled by means of a cam disc or a kinematic mechanism (link 68) (col.3 ll.47-49) (Fig.2).

27. The actuating device (66) is connected directly, via a shaft (col.3 ll.56-58), to an actuating member (link 68) (col.3 ll.47-49).

28. An air duct for supplying air; a metering device; and an air-guiding device, wherein the air-guiding device comprises a plurality of subducts for dividing air in the air-guiding device (Refer to rejection of claim 15),

29. A divided entry region (38) configured such that the air in the air-guiding device is divided into the plurality of subducts (36a, 36b) without any significant change in direction of the subducts in the divided entry region, and wherein the division in the entry region is axially symmetrical (col.3 ll.7-18) (Fig.2).

30. The air-guiding device further comprises an elbow, wherein the air is divided into a plurality of subducts in the region of the elbow (Refer to rejection of claim 20).

31. The metering device controls distribution of incoming air between individual subducts and controls metering of the incoming air (Refer to rejection of claim 25).

32. The metering device comprises an actuating device with a double flap controlled by a cam disc or a kinematic mechanism (Refer to rejection of claim 26).

33. An air duct for supplying air; a metering device; and an air-guiding device, wherein the air-guiding device comprises a plurality of subducts for dividing air in the air-guiding device (Refer to rejection of claim 15).

34. The air-guiding device comprises a divided entry region configured such that the air in the air-guiding device is divided into the plurality of subducts without any significant change in direction of the subducts in the divided entry region, and wherein the division in the entry region is axially symmetrical (Refer to rejection of claim 29).

35. The air-guiding device further comprises an elbow, wherein the air is divided into a plurality of subducts in the region of the elbow (Refer to rejection of claim 20).

36. The metering device controls distribution of incoming air between individual subducts and controls metering of the incoming air (Refer to rejection of claim 25).

37. The metering device comprises an actuating device with a double flap controlled by a cam disc or a kinematic mechanism (Refer to rejection of claim 26).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 28-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kinmartin in view of Kamiya (Pat. 6,575,701).

Kinmartin teaches the invention as discussed above. However, Kinmartin does not teach a coiled or elongate, helical region.

Kamiya teaches:

28. A coiled or elongated, helical region (col.1 ll.29-35).

33. A spot action to the air at an exit of the air duct and configured to impart a swirl to the air at the exit of the air duct (col.1 ll.29-35).

Therefore, it would have been obvious to a person having ordinary skills in the art at the time the invention was made to have modified the air inlet of Kinmartin in view of the teaching of Kamiya in order to blow air within a vehicle passenger compartment in particular for an air heater arrangement faster and more efficient airflow (Kamiya, col.1 ll.14-17).

(10) Response to Argument

(i) Appellant contends that Kinmartin does not teach an outflow region with an outer circumferential region and a middle region. However, claims are afforded their broadest reasonable interpretation. In this instant application, claim 15 requires an outflow region with an outer circumferential region and a middle region. Kinmartin teaches a region that air flows out of or an outflow region (12) which contains a middle region (at 58) which is in the middle of (12) and an outer circumferential region (46a and

46b) which surrounds the outer most part of the outflow region (12) (show in Figs.2-3 and described col.3 ll.19-21 and col.3 ll.44-58).

(ii) Appellant contends that Kinmartin does not teach any single outflow region. However, claims are afforded their broadest reasonable interpretation. In this instant application, claim 15 requires an outflow region with an outer circumferential region and a middle region. Kinmartin teaches a single region that air flows out of or an outflow region (12) which contains a middle region (at 58) which is in the middle of (12) and an outer circumferential region (46a and 46b) which surrounds the outer most part of the outflow region (12) (show in Figs.2-3 and described col.3 ll.19-21 and col.3 ll.44-58).

(iii) Appellant contends that Kinmartin does not teach one subduct going to one of these regions and a second subduct going to the other region. However, claims are afforded their broadest reasonable interpretation. In this instant application, claim 15 requires wherein one subduct leads to the middle region and another subduct leads to the outer circumferential region. Appellant implies that it is claimed that one subduct exclusively leads to the middle region and another subduct exclusively leads to the outer circumferential region, however this is not claimed and when air in Kinmartin is lead in the subducts 36a and 36b to both the middle region (58) and outer circumferential region (46a and 46b) it clearly satisfies one subduct (36b) leads to the middle region (58) and another subduct (36a) leads to the outer circumferential region (46a) (as shown in Fig.2, and the neutral position described col.3 ll.44-58).

(iv) In response to appellant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which appellant relies

(i.e., the outflow region partially surrounds the passage) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

(v) Appellant contends there is no motivation the artisan to form one of these two subducts (or for that matter both of them) in Kinmartin in a spiral configuration of Kamiya. However, the Examiner is not suggesting this to be done. Examiner is merely suggestion the blower casing of Kamiya which is spiral to be connected to the end of the outflow region (12) of Kinmartin. Appellant suggests an inherent definition of **subduct** to be ducts that are parallel to each other making up a duct. However, Examiner cannot find the word subduct to have this definition in the official dictionary nor has Appellant implicitly defined it in as this in the Specification. Examiner merely **defines a subduct as a sub section of a duct** and in this instance refers to three subducts in the rejection, two in Kinmartin (36a and 36b) and one in Kamiya (22). Examiner has found as evidence of such a definition of subduct that would allow the sequential arrangement to be taught of Kamiya to Kinmartin in: Patent Applications 2005/0095044 (with subduct 310 to subduct 320), 2002/0136509 (with subduct 30 to subduct 30), 2002/0071523 (subduct 7, subduct 8, subduct 9), 4,718,244 (subducts 54, 55, 56), and 4,692,113 (subduct 14). With this clarification, it should be obvious to connect the spiral subduct (22) of Kamiya with the subducts (36a and 36b) of Kinmartin to blow air within a vehicle passenger compartment in particular for an air heater arrangement faster and more efficient airflow.

(vi) Appellant contends that neither Kinmartin nor Kamiya teach a subduct that has a coiled or elongated, helical region. In regards to claim 28, as explain above Kamiya teaches a subduct (22) that as shown in Fig.9 is coiled or elongated starting at "start of winding" and ending at "end of winding" (col.12 ll.15-22).

(vii) Appellant contends that neither Kinmartin nor Kamiya teach one of the subducts configured to impart a spot action to the air at an exit of the air duct and another of the subducts configured to impart a swirl to the air at the exit of the air duct. In regards to claim 33, Kinmartin in view of Kamiya's providing air to the subduct of Kinmartin (36a) that imparts a spot action (or as Appellant Specification states is when swirl-free air is discharged to the interior of the vehicle) to the air at an exit (46a) since the air flows straight through the exit (Fig.4, Kinmartin) and another of the subducts (36b) configured to impart a swirls to the air inherently at the exit (46b) (Fig.4 Kinmartin) when the airflow which is flowing vertical hits the wall (shown in Fig.4) to then be directed around the corner shown at (46b) to exit, it will create a slight swirling action of the air.

(viii) The Appellant contends that Kinmartin and Kamiya can not be combined because they perform two separate functions. However, both Kinmartin and Kamiya in a broader view provide air to a vehicle. Furthermore, Kinmartin teaches the distribution duct (12) being connected to a blower casing at (10) (col.2 ll.28-31) and Kinmartin teaches a blower casing subduct that is to be connected to a vehicle distribution duct (col1 ll.14-17).

(ix) In response to appellant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir.1992). In this case, it would have been obvious to a person having ordinary skills in the art at the time the invention was made to have modified the air inlet of Kinmartin in view of the teaching of Kamiya in order to blow air within a vehicle passenger compartment (col.1 ll.14-17) in particular for an air heater arrangement even if argued not faster, though Kamiya teaches improving the performance, it is more efficient by producing more airflow for less power as shown in Fig.11 and described (col.2 ll.53-62 and col.12 ll.40-45). Furthermore, it would have been obvious to a person having ordinary skills in the art at the time the invention was made to have modified the air inlet of Kinmartin in view of the teaching of Kamiya in order to reduce the noise produced (Fig.12) (col.2 ll.53-62 and col.12 ll.46-57).

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Samantha A. Miller

/Samantha A Miller/

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